

PROCESS FOR PRODUCING POLYURETHANE MOLDINGS

ABSTRACT OF THE DISCLOSURE

Polyurethane moldings are produced by conveying in shot operation at least one isocyanate component and at least one polyol component for a predetermined time-interval Δt into a mixing chamber with predetermined volumetric flow-rates $\dot{V}_{s/iso}$ for the isocyanate and $\dot{V}_{s/polyol}$ for the polyol and with predetermined pressures $p_{s/iso}$ for the isocyanate and $p_{s/polyol}$ for the polyol, mixing those components in a mixing chamber, and discharging the polyurethane reaction mixture into a mold. Prior to shot operation, the components are conveyed in a circuit through circulation lines between the mixing head and the respective component storage vessels. The pressures of the components are measured by means of pressure sensors and are transmitted via pulse lines to a control device. During conveyance in the circuit, the volumetric flow-rates of the components are adjusted in such a way that the pressures of the components in the circuit correspond to the predetermined pressures $p_{s/iso}$ and $p_{s/polyol}$ of the components for shot operation. During the change-over from circulatory mode of operation to shot operation, the predetermined volumetric flow-rates $\dot{V}_{s/iso}$ and $\dot{V}_{s/polyol}$ of the components are adjusted for shot operation. The adjustment of the volumetric flow-rates of the components may be effected by the control device by adjusting the drive units of the metering elements.